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Observations on the Directions given by various Writers on the Practice of Midwifery, for Turning the Child ; with an Account of an Improved Method of performing that Operation. By JOHN BREEN, M.D. Licentiate of the King and Queen's College of Physicians in Ireland, late Assistant to the Lying-in Hospital, Dublin.

To suggest an improvement in an operation frequently practised, for more than two centuries, by many eminent men, or to point out a variety in the method of performing it, at first

view may appear presumptuous, or even ridiculous. But on reflecting that, in machinery and mechanical contrivances, improvements are daily made that excite surprise, equally by their simplicity and utility, the writer will be pardoned for instituting an inquiry into the best method of performing so important an operation, and questioning the propriety of the practice recommended in books of most approved authority on the subject. As though it may be doubted, whether society has been more benefited or injured by the inventions of the forceps and lever, few practitioners of midwifery will hesitate to acknowledge the unequivocal advantages of turning, in certain preternatural presentations, since without this resource, left to unassisted nature, both parent and child would in most instances perish.

When a well instructed accoucheur is in early attendance, little difficulty occurs in the management of the majority of cases of this description. Very considerable obstacles, however, now and again occur, which, were it the intention of the author to write a dissertation on the general management of preternatural labour, it would be his duty to point out. Such not being the purpose of this paper, it may be allowed to illustrate the occasional difficulties, by reference to writers of deserved eminence, and extensive practice, who describe from actual experience. Mauriceau, Vol. I. p. 268, thus expresses himself: "*Cellecy est la plus rude, et la plus laborieuse et penible de toutes les operations de chirurgie, en laquelle le chirurgien sue quelquefois à grosses gouttes, meme au plus grand froid de l'hiver, pour la peine et difficulté, qu'il y rencontre ordinairement.*" Dr Sims, in the Medical and Physicall Journal for June 1802, recommends, in certain difficult cases of arm presentation, to use the crotchet, and deliver in the manner least likely to injure the mother. Dr Joseph Clark of Dublin, in a letter to Dr Sims, published in a subsequent number of the same Journal, approves of this practice. These highly respectable authorities sufficiently demonstrate the difficulty that sometimes attends the management of presentations of the shoulder and arm. I do not mean to assert, that the method I recommend will supersede such an expedient, but I conceive it will render the necessity of resorting to it less frequent.

An investigation of the mechanism of the operation of turning, and a demonstration of the best method of performing it, are requisite steps in our inquiry. If it should appear that the most esteemed writers on midwifery have not treated this subject with that degree of attention which its importance merits, such inquiry will be useful at least to the junior practitioner.

To have a clear idea of our subject, it is necessary to consider, in the first place, what is the natural position of the fœtus in

utero. It is now fully ascertained, that the child is disposed in such a manner that it may occupy the least possible space. For this purpose the head is inclined on the chest, the spine incurvated forward, and the lower extremities so folded, that the knees are nearly in contact with the upper part of the abdomen, the heels applied to the breech, with the ankles generally crossing each other. The superior extremities vary in their position, and perhaps will not be found exactly similarly circumstanced in any two cases. On the contrary, the position of the lower extremities, with regard to the trunk, is nearly the same, whatever part may present at the brim of the pelvis in the commencement of labour. In proof of the constancy and uniformity of the relative position of the lower extremities with regard to the trunk, it is observed, that the new-born infant, left to itself, folds its lower limbs in the manner now described. Deviations then from this position must be considered as exceptions to a general law. Hence it would seem to follow, that where it may be necessary to turn the child, the operator should not remove the inferior extremities from this natural position, provided he can effect his purpose while they remain in it; and it is the principal object of this paper to shew, that, in most instances, he has this power. As the child occupies the least possible space in the uterus in the position described, more power and freedom is given, by this circumstance, to the hand of the operator, consequently any unfavourable situation of the child is more easily altered while it is in this position.

Let us now consider what change of situation the child must undergo where we turn, in preternatural presentations of the superior extremities. Reflection will satisfy us, that it must revolve on the lesser axis of the trunk, and describe an arch more or less extensive. By the lesser axis will be understood an imaginary line passing from side to side, nearly opposite the umbilicus, represented in the plate by the line X x. It is obvious, that, in all presentations of the superior parts of the child, where it is turned, this kind of rotatory movement must be effected. The next step is to ascertain how the child can be made revolve with the greatest facility in the manner pointed out. Since the writings of Ambrose Paré, who, in modern times, gave the first positive instructions to turn, most succeeding writers on midwifery, including Mauriceau, Smellie, Baudeloque, Denman, Hamilton, Burns, and Merriman, direct a foot or the feet to be sought for, and the child to be thus turned. The error of these directions will, I conceive, be made to appear in the progress of this inquiry.

The plate represents one of the most difficult preternatural cases, and is nearly a copy from Smellie, (being his 34th plate,)

to avoid the imputation of inventing a position favourable to the illustration of the method now recommended. Were this plate exhibited to an intelligent person, whose mind had not been biassed by such expressions as "tirer par les pieds," "search for the feet and turn," and an inquiry made from such an individual, what would be the best method of changing the situation of the child, so that the head should be removed towards the fundus uteri, little doubt can exist, that he would direct one or two fingers to be hooked in the flexure of the knee, and the other hand to be applied to the presenting part, which should be pushed gently upwards, while the hand engaged in the uterus should be drawn downwards and forwards, towards the centre of the longest diameter of the brim of the pelvis. By thus proceeding, the child would be made revolve on the lesser axis of the trunk, and the foot would be brought into the vagina within the reach of a noose. By adopting a different procedure, and endeavouring to lay hold of a foot, according to the usual directions, it is obvious, that the hand of the operator must traverse a greater space of the uterus, a matter of very considerable difficulty, either when the action of that viscus is strong, or when it is closely contracted on the body of the child. This difficulty being surmounted, when the foot is laid hold on, it is very apt to slip and recede from the grasp, as well from the violence of uterine action, as from the hand being cramped, and nearly powerless, by reason of the previous exertion. Those of my readers engaged in the practice of midwifery will be well aware, that these difficulties are not imaginary, but such as frequently occur, and cause extreme embarrassment to the practitioner, and much additional pain to the patient. By adhering to the direction of hooking the knee, the hand of the operator is in a great measure protected during the pains, and he is enabled deliberately to proportion the force requisite to change the position to the resistance he encounters. Besides, as the knees must have been nearly in contact with the superior part of the abdomen from the earliest developement of the extremities of the embryo, should, what may be called accidental circumstances have removed them from this natural and usual position, but little force will be requisite to restore them to it. I am satisfied it sometimes happens in a position such as is represented in the plate, that when the proper measures are not taken in time, that, by the strong and violent action of the uterus, an inferior extremity may be removed from the natural situation, and a foot brought nearer than the knee to the vagina. In such case it will of course be proper to take hold of the foot in preference to searching for the knee. This occurrence I consider more likely to have frequently taken place when the practice of midwifery

was generally entrusted to females; and perhaps it assists in explaining the almost universal direction of writers on the subject, to search for the feet. By a timely introduction of the hand, in the great majority of cases, the knees will be found in a state of flexure near the abdomen.

Having now endeavoured to give a general view of the operation, I will next proceed to point out, more particularly and explicitly, the manner in which it is to be performed. When the practitioner has decided on the propriety of turning, the first thing to be ascertained is, whether the os uteri be sufficiently dilated to allow the introduction of the hand? I pass by the consideration of the few cases in which it may be proper artificially to dilate that part. The state of the os uteri being favourable, the patient is to be placed on her left side, in the manner women are usually delivered in these countries, as, by deviating as little as possible from the ordinary method, our patient and her friends will be the less alarmed, and more satisfied. The hand of the operator, lubricated with some unctuous matter, and forming a conical figure, is to be introduced slowly and cautiously through the vagina and os uteri, along the abdomen of the child, on which, as much as can be, it is to lie at rest during each pain. In the intervals of pain the hand must be pushed upwards until it arrive at one of the knees; one or two fingers should now be hooked in the flexure of this part. The operator must then draw the knee downwards and forward, towards the centre of the great diameter of the brim of the pelvis, and, if any difficulty occur, he will, at the same time, endeavour gently to push up the presenting part. Should the child still continue jammed, after using moderate force, I would recommend the situation of the hand in utero to be varied, and the fingers to be hooked in the flexure of the other knee. When, by this procedure, one foot is brought within the reach of a noose, it may be sometimes necessary, after applying one, to retrace the same steps to bring the second, within the power of a similar application. By acting according to these directions, I can scarcely conceive the possibility of failure, where it is practicable to introduce the hand. Should the presenting part be so wedged in the pelvis as not to permit this measure with safety, it then becomes a subject for consideration, whether the method of Dr Sims before mentioned is to be acted on? or whether spontaneous evolution* is to be trusted to? It would be foreign to the purpose of this paper to discuss these points. I must, however, observe, that I have now pointed out difficulties that I have not experienced

* An ingenious friend, Dr Douglas of this city, in an Essay on Spontaneous Evolution, maintains that it will universally occur.

since I relinquished the practice of searching for the feet, as I have universally found, that, when I reached a knee, the remainder of the operation was easily accomplished.

In my own practice, I always introduce the left hand, *per vaginam*, for the purpose of having the right uncramped, and, therefore, more efficient in expediting the latter part of the delivery, particularly the quick extrication of the head, on which the preservation of the life of the child so essentially depends.

In concluding the first part of what I proposed at the commencement of this essay, I can state, that the alteration of practice I suggest is not the hypothesis of the closet, but is an operation that has been often successfully practised. The mode of operating I recommend, first suggested itself to me under circumstances peculiarly embarrassing, where it was nearly impossible to have a consultation,—so true it is that necessity is the parent of invention.

Intending to limit my observations to the mechanical part of the operation, I avoid treating of bleeding and opiates, as auxiliaries in facilitating it. For the same reason I do not point out more than by this slight reference, the advantages derivable from this method in cases of twins, and of prolapsus of the funis during labour; but my reader, if engaged in the practice of midwifery, will not be at a loss to make the application.

To exemplify my remark that the writers on midwifery, most generally and deservedly esteemed, direct a foot, or the feet, to be sought for; though not first in chronological order, I shall begin with Dr Denman, who, I think, must have occasionally operated in the manner I suggest. The following passage is to be found in the 2d volume of his *Midwifery*, page 245. “But in the longitudinal contraction, the feet being at a great distance, there is more difficulty, though it is not always necessary to go up to the fundus; for when we come to the knees, these being cautiously bent, the legs and feet will be brought down together.” These directions are given as an exception to a general rule; for in the immediately preceding pages, 232, 237, 244, same volume, when laying down rules for the management of the most favourable, as well as the most difficult cases of arm and shoulder presentation, he distinctly and explicitly recommends the feet to be sought for. There can be little doubt, that, had not this judicious writer been biassed by the opinions of his predecessors, he would not thus slightly have passed over the advantages of turning by means of the knees.

It would lengthen this essay, but not tend to any useful purpose, to quote the directions given by Mauriceau, Smellie, Bauddeloque, Hamilton, Burns, and Merryman, for turning the child. A reference to their works will prove, that each direct

the feet to be sought for. There are delineations in plates of presentations of the superior extremities, to which the method of turning I recommend does not appear applicable; these cases are either excessively rare, or, what I believe to be more likely, are the invention of authors in their closets.

Explanation of the Plate.

x x supposed axis.

A B C os sacrum and coccyx.

E F perinæum.

Dublin, 5, Cavendish Row, }

November 14th 1817. }



at break operation of turning.

